

## **SERVICES AUTHORIZATION #I ENGINEERING SERVICES AGREEMENT**

*THIS SERVICES AUTHORIZATION* is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the **City of Orlando, Florida**, a municipal corporation existing under the laws of the State of Florida (CITY), and **Wantman Group, Inc.**, doing business locally at 213 South Dillard Street, Suite 210, Winter Garden, Florida 34787 (ENGINEER).

*WHEREAS*, the CITY and the ENGINEER have previously entered into an agreement for the ENGINEER's professional services (Agreement) on August 7, 2013 concerning the Sligh Boulevard Project (Project); and

*WHEREAS*, the Agreement was approved and authorized by the City Council and signed by the Mayor Pro Tem and City Clerk, as Documentary #130805B14; and

*WHEREAS*, the CITY and the ENGINEER wish to amend the Agreement as set forth herein; and

*WHEREAS*, the CITY and the ENGINEER now wish to memorialize their understanding for the ENGINEER's additional professional services for the Project.

*NOW, THEREFORE*, in consideration of the mutual promises and covenants contained herein and given one to the other, the sufficiency of which is hereby acknowledged, the parties agree as follows:

### **I. SCOPE OF SERVICES**

The scope of services has been agreed to by the parties, and is attached hereto and incorporated herein, by reference, as EXHIBIT I.

### **II. FEE**

A total not-to-exceed fee of \$197,233.57 has been agreed to by the parties, and is attached hereto and incorporated herein by reference, as EXHIBIT II. Notwithstanding the preceding, activity 7A only in the amount of \$44,500 plus a contingency of \$5,000 (if exercised) shown on EXHIBIT II, shall be paid on a lump sum basis.

### **III. TERM**

ENGINEER shall complete all work in accordance with the timeframes set forth in the scope of work, if any, provided, however, that all work and the term of the Services Authorization shall be completed by the end of business (5:00 p.m.) on October 22, 2015. It is also agreed that the CITY shall have an option for extension of this Services Authorization as necessary to complete the present scope of Services (Exhibit I) or to provide additional services.

#### IV. ENTIRE AGREEMENT

This Services Authorization supersedes all previous services authorizations, amendments, agreements, or representations, either verbal or written, heretofore in effect between the CITY and the ENGINEER that may have concerned the matters covered herein, except that this Services Authorization shall in no way supersede or amend the Agreement or other services authorizations or amendments except as specifically provided herein. No additions, alterations, or variations to the terms of this Services Authorization shall be valid, nor can the provisions of this Services Authorization be waived by either party, unless such additions, alterations, or waivers are expressly set forth in writing in a document duly executed by both parties. ENGINEER acknowledges and agrees that any proposals or proposed agreements from subconsultants attached to this SERVICES AUTHORIZATION are attached solely to reflect the scopes of work to be performed and the fees to be charged by such subconsultants. By executing this SERVICES AUTHORIZATION, the CITY does not become a party thereto or bound by the terms thereof.

*IN WITNESS WHEREOF*, the parties hereto have executed this Services Authorization on the day and year first written above.

**City of Orlando, Florida**

By: \_\_\_\_\_  
David Billingsley, CPSM, C.P.M.  
Chief Procurement Officer

APPROVE AS TO FORM AND LEGALITY  
for the use and reliance of the  
City of Orlando, Florida, only.

\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Assistant City Attorney  
Orlando, Florida

**Wantman Group, Inc.**

By: \_\_\_\_\_

\_\_\_\_\_  
(Print Name)

Title: \_\_\_\_\_

STATE OF FLORIDA        }

COUNTY OF \_\_\_\_\_ }

*PERSONALLY APPEARED* before me, the undersigned authority, \_\_\_\_\_, [ ] well known to me or [ ] who has produced \_\_\_\_\_ as identification, and known by me to be the \_\_\_\_\_ of the corporation named above, and acknowledged before me that he/she executed the foregoing instrument on behalf of said corporation as its true act and deed, and that he/she was duly authorized to do so.

*WITNESS* my hand and official seal this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

Print Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_



Wantman Group, Inc.

April 30, 2014

Mr. John Rhoades  
City Of Orlando  
Transportation Planning Division  
400 S. Orange Ave.  
Orlando, FL 32801

**Re: Sligh Blvd & Columbia Street Professional Engineering Services Supplemental  
(Contract 13-0346)**

Dear Mr. Rhoades:

Wantman Group, Inc. (WGI) is pleased to provide this memo for the explanation of revised scope of professional engineering services to the City of Orlando for the subject project. Our scope of services and corresponding fees are detailed below.

**SCOPE OF SERVICES**

WGI scope of services will include the following:

**A. Engineering Design Phase Services**

1. Development of Concept Plans for Columbia Street.
2. Additional hours for development of roadway plans for Columbia Street & Sligh Boulevard.
3. Additional hours for development of design phase & plans to incorporate drainage closed system on Sligh Boulevard & Columbia St.
4. Additional hours for development of plans & coordination with utility agency owners.
5. Additional hours for development of plans & coordination for sewer main.
6. Additional hours for development of plans & coordination for water main.
7. Additional hours for additional topographic & route survey updates due to recently constructed elements as part of the Sunrail construction that tie into city owned right-of-way.
8. Additional hours for utility designation & utility test holes services due to the added conflicts of the proposed drainage closed system.
9. Additional hours for the survey final deliverable updates due to the revision of scope of services.
10. Additional hours for development of roadway maintenance of traffic plans for Columbia Street & Sligh Boulevard. **(Dannick Engineering)**

**FEES**

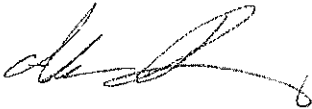
Our fees for the proposed scope of services are as follows:

<u>Task</u>	<u>Type</u>	<u>Budget</u>
1. Engineering Design Phase Services (WGI )	Not to Exceed	\$ 163,285.57
2. Engineering Design Phase Services (Dannick)	Not to Exceed	\$ 33,948.00
TOTAL FEE		\$ 197,233.57

We appreciate the opportunity to be of service to City of Orlando.

Respectfully submitted,

**WANTMAN GROUP, INC.**



Alfredo Rodriguez, P.E.  
Project Manager

T:\21351346.00 Sligh Boulevard\WGI\_DATA\Project Management\Scope and Fee\Staff Hours & Fee Estimates\Final  
Supplemental\Submitted\01 Proposal - Supplemental.doc



Wantman Group, Inc.

Engineering ♦ Surveying ♦ Environmental ♦ Planning

April 14, 2014

Mr. Matthew Tibbetts  
Water Distribution Engineering  
Orlando Utilities Commission  
3800 Gardenia Avenue  
Orlando, FL 32839

**Re: Sligh Blvd & Columbia Street Water Main Design  
Proposal for Professional Engineering Services**

Dear Mr. Tibbetts:

Wantman Group, Inc. (WGI) is pleased to provide this proposal for professional engineering services to the Orlando Utilities Commission (OUC) and the City of Orlando for replacing approximately 2,500 LF of existing water main along Sligh Blvd (from E Miller St to W Columbia St) and Columbia Street (from S Division Ave to Sligh Blvd) in conjunction with the City of Orlando's roadway project of the same limits. Our scope of services and corresponding fees are detailed below.

**SCOPE OF SERVICES**

WGI scope of services will include the following:

**A. Engineering Design Phase Services**

WGI will perform the following engineering design services for the new water main: and will incorporate roadway and sewer designs provided by WGI.

1. Visit the site to investigate the existing features along the proposed alignment.
2. Design and prepare on-site potable water distribution plans including details in accordance with OUC, City of Orlando, and Florida Department of Environmental Protection standards.
3. Prepare a plan/profile and details for water main improvements that will be jack and bored under an existing CSX railroad crossing along Columbia Street. Plans will be prepared per FDOT specifications and requirements for CSX permitting.
4. Permitting with FDOT and CSX may be required at rail road crossing and is included in permitting phase of work.
5. Prepare any Technical Specifications for critical components of construction not covered in the plan details and specifications.
6. Review OUC specifications for conflicts with City of Orlando specifications, and prepare the Division 0 and Division 1 specifications to include OUC (i.e. Measurement and Payment, Bid Form, etc.)

7. Submit to OUC and the City of Orlando 60% and 100% construction documents. Deliverables will include on 11x17 hardcopy, and a Adobe X PDF file for each submittal and final signed / sealed set.
8. Prepare the Engineer's Opinion of Cost at the 60% and 100% submittal.

**B. Permitting Phase Services**

WGI will prepare and submit the permit applications along with the required associated design documents. All permit fees will be paid by WGI and reimbursed by OUC and the City of Orlando. Required permit fees will be established during the permitting phase. We anticipate submitting applications and documents to the following agencies:

1. Orlando Utilities Commission (OUC) Water Plan Approval.
2. Florida Department of Environmental Protection (FDEP) – Water Permit.
3. CSX Railroad (CSX) – Utility Construction Permit under railroad tracks.
4. Florida Department of Transportation Utility Permit – Utility Construction permit under railroad tracks.

**C. Post Design Services**

WGI will perform the following construction phase services for the water main improvements:

1. Attend up to one (1) pre-construction meeting with the Contractor, OUC and the City of Orlando.
2. Review up to ten (10) shop drawing submittals from the Contractor.
3. Perform periodic field observations of construction for the work included in the civil engineering plans to ensure the work is completed in substantial accordance with the approved and permitted plans and specifications. Observations will include pressure test and pigging and flushing of the new water main. (Budget 40 hours)
4. Respond to Contractor's Request for Additional Information (RAI) and Change Orders.
5. Coordinate and submit record drawings prepared by Contractor's Professional Surveyor registered in the State of Florida to permitting agencies for approval.
6. Attend a pre-final and final field review with OUC and the City of Orlando and prepare punch list.
7. Prepare and submit construction certification packages for final acceptance.
8. Provide OUC and the City of Orlando a signed / sealed set of 11x17 record drawings and AutoCAD files (2012 format or earlier).

### **BASIS OF THIS PROPOSAL**

This proposal is based on the following:

1. WGI shall be entitled to rely on the completeness and accuracy of all information provided by OUC. Information requested by WGI during the project will include, but may not be limited to:
  - a. Conceptual layout of proposed water mains to be incorporated into the design.
  - b. Locations of all existing water mains and services along the project corridor that will require re-connection.
2. The water main design will incorporate roadway and sewer designs prepared by WGI under a separate contract.
3. Design of new water main improvements is based conceptual drawing information provided by OUC. Any additional work required to locate services or other water main elements is not included.
4. Additional submittals and coordination with permitting agencies not due to WGI's work will be invoiced on an hourly basis in accordance with the attached fee schedule.
5. The project will be designed and permitted in one (1) phase.
6. Locating any additional water services not provided by OUC drawings with Subsurface Utility Engineering (SUE) services can be provided at a daily allowance of \$2,500 / day for a total of two (2) days. Authorization by OUC and City of Orlando will be required prior to doing this work for any additional days..
7. 60% and 100% construction documents submittals will include the following plan sheets:
  - Cover Sheet
  - Key Sheet
  - Water Plan and Profile
  - Detail Sheets
8. Deliverables to OUC and the City of Orlando will include on 11x17 hard copy, and an Adobe X PDF file for the 60% and 100% submittals and a signed /sealed 100% set.
9. Water Plan and Profile sheets will be drawn at 1"= 20' scale.
10. Civil engineering specifications and details will be included in the construction plans.
11. All water main construction is assumed to occur simultaneously with the roadway construction eliminating the need for additional Storm Water Pollution Prevention Plans.



12. All M.O.T. during construction is assumed to occur simultaneously with the roadway construction eliminating the need for additional M.O.T. plans.
13. The project will be constructed in one (1) phase.
14. Site Visits for construction administration are based on a budget of forty (40) hours. Additional time for site visits will be pre- approved by OUC, City of Orlando and invoiced on an hourly basis in accordance with the attached fee schedule.
15. Services not included:
  - Survey, title search, easements, legal descriptions or plats.
  - Environmental, Traffic, Structural, Electrical or Mechanical Engineering services.

### **FEES**

Our fees for the proposed scope of services are as follows:

<u>Task</u>	<u>Type</u>	<u>Budget</u>
1. Engineering Design Phase Services	Lump Sum	\$ 22,500
2. Permitting Services	Lump Sum	\$ 8,500
3. Post Design Services	Lump Sum	\$ 13,500
TOTAL LUMP SUM FEE		\$ 44,500 *

<u>Optional Task if Requested</u>	<u>Type</u>	<u>Budget</u>
1. Additional Subsurface Utility Locate Services	Lump Sum	\$ 5,000
TOTAL FEE INCLUDING OPTIONAL SERVICES		\$ 49,500 *

\*Permitting Fees are not included in total fee. Required permit fees will be established during the permitting phase scope of work.

We appreciate the opportunity to be of service to the Orlando Utilities Commission and the City of Orlando.

Respectfully submitted,

**WANTMAN GROUP, INC.**

*Jennifer L. Morton*

Jennifer Morton, RLA, LEED-AP  
Land Development Manager  
LA 0001666

**WANTMAN GROUP, INC**  
**FEE SCHEDULE**  
**EFFECTIVE DATE – JANUARY 29, 2014**

**Hourly Rate**

Principal Engineer	\$275.00
Expert Witness	\$350.00
Project Manager	\$175.00
Senior Professional Engineer	\$150.00
Professional Engineer	\$130.00
Field Engineer	\$125.00
Engineer Intern	\$100.00
CADD Technician	\$ 90.00
Environmental Scientist	\$130.00
Planner – Public Hearing Representation	\$250.00
Principal Planner	\$200.00
Planner	\$130.00
Assistant Planner	\$ 90.00
GIS Technician	\$ 90.00
Principal Surveyor	\$225.00
Senior Professional Surveyor	\$150.00
Professional Surveyor	\$130.00
Survey Intern	\$100.00
2 Man Field Crew	\$120.00
3 Man Field Crew	\$150.00
4 Man Field Crew	\$180.00
5 Man Field Crew	\$210.00
Utility Coordinator	\$120.00
Designating Crew	\$120.00
Vacuum Excavation Crew	\$200.00
Laser Scan Crew	\$250.00
Hydrographic/Bathymetric Crew	\$325.00
Administrative Assistant	\$ 70.00
Blueprints (per sq. ft.)	\$ 0.60
Full Color Plot (per sq. ft.)	\$ 15.00
Photo Mylars (each)	\$120.00
Mylars (per sq. ft.)	\$ 6.00
Copies, Black & White (each)	\$ 0.30
Copies, Color (each)	\$ 1.00
Other Expenses	Cost Plus 10%

**Expenses:** In addition to labor, WANTMAN bills for the following project related costs at a contractually agreed markup: printing; conference calling charges; document review, permit or recording fees paid on behalf of CLIENT; shipping; bid advertisement; specialty materials, software or equipment rental; sub-consultant fees; costs of project related employee travel including meals, lodging, airfare and miscellaneous travel costs such as tolls, parking, etc; mileage for all company-owned vehicles (trucks) will be charged at \$0.85/mile; employee owned vehicles used for transportation related to the Project will be charged at the prevailing federal mileage rate allowed by the IRS at the time the travel occurs.

WANTMAN also bills for the cost of internal reproduction and the use of specialized equipment related to subsurface utility vacuum excavation, mobile scanning (LIDAR), and hydrographic surveying.

**Rates Are Valid Through December 31, 2014**

**Fee Schedule Accepted by:**

\_\_\_\_\_

21351346.00 - City of Orlando Sligh Blvd. (13-0346)			
WGI ACCOUNTING TASK AMOUNTS			
WGI	Original	Revised	Differential
Survey Field Support	\$ 23,850.00	\$ 30,446.00	\$6,596.00
Survey Office Support	\$ 7,478.00	\$ 8,702.00	\$1,224.00
Survey SUE Services	\$ 20,302.50	\$ 27,112.50	\$3,257.00
AGS (Title Search)	\$ 8,600.00	\$ 2,500.00	(\$6,100.00)
Survey Subtotal	\$ 60,230.50	\$ 68,760.50	\$8,530.00
Project Management (Includes Misc Item)	\$ 59,592.12	\$ 59,592.12	\$0.00
Roadway	\$ 144,903.36	\$ 203,493.96	\$58,590.60
Drainage	\$ 1,350.24	\$ 22,194.57	\$20,844.33
Utilities (Util Coordination & Sewer design)	\$ 28,689.60	\$ 54,510.24	\$25,820.64
Utilities (Water Design - OUC Contract)	\$ -	\$ 49,500.00	\$49,500.00
Permitting	\$ 3,678.30	\$ 3,678.30	\$0.00
Signing and Pavement Markings	\$ 31,979.16	\$ 31,979.16	\$0.00
Roadway and Drainage Subtotal	\$ 270,192.78	\$ 424,948.35	\$154,755.57
WGI Total	\$ 330,423.28	\$ 493,708.85	\$163,285.57
Dannick	\$ 78,418.50	\$ 112,366.50	\$33,948.00
RSH	\$ 95,469.84	\$ 95,469.84	\$0.00
Buchheit	\$ 19,068.00	\$ 19,068.00	\$0.00
Tierra	\$ 22,533.74	\$ 22,533.74	\$0.00
Expenses	\$6,438.40	\$ 6,438.40	\$0.00
Grand Total	\$ 552,351.76	\$ 749,585.33	\$197,233.57

**Wantman Group, Inc.**

**City of Orlando Sligh Boulevard Project**

Description	Hours	Original Hours		Hours	Revised Hours		Hours	Fee (3.0)
		Fee	Fee (3.0)		Fee	Fee (3.0)		Differential
<b>Roadway</b>								
Act. 3 - Project Common and General Tasks	268	\$ 12,177.25	\$ 36,531.75	268	\$12,177.25	\$ 36,531.75	0	\$ -
Act. 4 - Roadway Analysis	773	\$ 29,221.88	\$ 87,665.64	1093	\$41,304.44	\$ 123,913.32	320	\$ 36,247.68
Act. 5 - Roadway Plans	470	\$ 19,079.24	\$ 57,237.72	657	\$26,526.88	\$ 79,580.64	187	\$ 22,342.92
Act. 6 - Drainage Analysis	16	\$ 450.08	\$ 1,350.24	263	\$7,398.19	\$ 22,194.57	247	\$ 20,844.33
Act. 7 - Utilities (Util Coordination & Sewer design)	200	\$ 9,563.20	\$ 28,689.60	380	\$18,170.08	\$ 54,510.24	180	\$ 25,820.64
Act. 7A - Utilities (Water Design - OUC Contract)	0	\$ -	\$ -	N/A	\$16,500.00	\$ 49,500.00	N/A	\$ 49,500.00
Act. 8 - Env. Permits, Compliance & Clearances	30	\$ 1,226.10	\$ 3,678.30	30	\$1,226.10	\$ 3,678.30	0	\$ -
Act. 19 - Signing & Pavement Marking Analysis	194	\$ 7,430.44	\$ 22,291.32	194	\$ 7,430.44	\$ 22,291.32	0	\$ -
Act. 20 - Signing & Pavement Marking Plans	79	\$ 3,229.28	\$ 9,687.84	79	\$ 3,229.28	\$ 9,687.84	0	\$ -
Miscellaneous		\$ 7,686.79	\$ 23,060.37		\$ 7,686.79	\$ 23,060.37	0	\$ -
<b>Subtotal Roadway:</b>	<b>2030</b>	<b>\$ 90,064.26</b>	<b>\$ 270,192.78</b>	<b>2964</b>	<b>\$ 141,649.45</b>	<b>\$ 424,948.35</b>	<b>934</b>	<b>\$ 154,755.57</b>

Description	Hours	Original Hours		Hours	Revised Hours		Hours	Fee (3.0)
		Fee	Fee (3.0)		Fee	Fee (3.0)		Differential
<b>Survey</b>								
Task 1 - Topo and Route	168	\$ 21,250.50	\$ 21,250.50	176	\$ 22,260.50	\$ 22,260.50	8	\$ 1,010.00
Task 2 - Utility Designation	91	\$ 10,350.00	\$ 10,350.00	110	\$ 12,360.00	\$ 12,360.00	19	\$ 2,010.00
Task 3 - Utility Test Holes	112	\$ 16,720.00	\$ 16,720.00	179	\$ 26,500.00	\$ 26,500.00	67	\$ 9,780.00
Task 5 - Title Search (AGS) (15)	29 Parcels	\$ 8,600.00	\$ 8,600.00	8 Parcels	\$ 2,500.00	\$ 2,500.00	0	\$ (6,100.00)
Task 6 - Title Review Services	8	\$ 880.00	\$ 880.00	8	\$ 880.00	\$ 880.00	0	\$ -
Task 7 - Final Deliverables	27	\$ 2,430.00	\$ 2,430.00	49	\$ 4,260.00	\$ 4,260.00	22	\$ 1,830.00
<b>Subtotal Survey:</b>	<b>238</b>	<b>\$ 60,230.50</b>	<b>\$ 60,230.50</b>	<b>346</b>	<b>\$ 68,760.50</b>	<b>\$ 68,760.50</b>	<b>108</b>	<b>\$ 8,530.00</b>
<b>Grand Total:</b>	<b>2268</b>	<b>\$ 330,423.28</b>	<b>\$ 330,423.28</b>	<b>3310</b>	<b>\$ 493,708.85</b>	<b>\$ 493,708.85</b>	<b>1042</b>	<b>\$ 163,285.57</b>

## TASK BREAKDOWN – WANTMAN GROUP

Project Fee Schedule: Sheet 1

WANTMAN GROUP, INC.

Sligh Boulevard Improvements Supplemental Utility Locations (48 additional test holes due to the drainage improvements and surveying 15 sanitary inverts).  
 Title work was reduced from 29 parcels to 8 parcels that could be affected by utility and/or drainage impacts.

No.	Task Item	PSM	SR PSM	Technician	Clerical	3-Person Survey Crew	Utility Designating Crew	Vacuum Excavation Crew	Task Total
	<b>2013 WGL Rates</b>	\$ 120.00	\$ 150.00	\$ 70.00	\$ 50.00	\$ 150.00	\$ 120.00	\$ 195.00	
1	Topographic and Route Survey (includes Horizontal and Vertical Control)	1	1	2	0	4			\$ 1,010.00
2	Utility Designation	4	1	6	0	0	8		\$ 2,010.00
3	Utility Test Holes	8	2	16	1	10		30	\$ 9,780.00
4	Specifice Purpose Right of Way (Apparent) Survey								\$ -
5	Title Search (LS to be provided by others)								\$ -86,100.00
6	Title Review Services								\$ -
7	Final Deliverables	3	2	16	1				\$ 1,830.00
	<b>Total Cost</b>								\$ 8,530.00
	<b>Total Hours</b>	16	6	40	2	14	8	30	
	<b>Cost by Position</b>	\$ 1,920.00	\$ 900.00	\$ 2,800.00	\$ 100.00	\$ 2,100.00	\$ 960.00	\$ 5,850.00	

# ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Reconstruction of Sligh Boulevard and Columbia Street  
County: Orange County - City of Orlando  
FPM: N/A

WGI Roadway - Exhibit II

Consultant Name: Warrman Group, Inc.  
Consultant No.:  
Date: 2/21/2014

FAP No.:

N/A

Staff Classification	Total Staff Hours From Summary	Sr. Proj Manager	QC Princ.	QC Rev.	Sr. Project Engineer	Project Engineer	Lead Utility Coordinator	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	268	201	0	0	67	0	0	0	0	0	0	0	268	\$12,177.25	\$45.44
4. Roadway Analysis	1,093	328	0	0	383	383	0	0	0	0	0	0	1,094	\$41,304.44	\$37.76
5. Roadway Plans	657	164	33	33	230	197	0	0	0	0	0	0	657	\$26,526.88	\$40.38
6. Drainage Analysis	263	0	0	0	0	263	0	0	0	0	0	0	263	\$7,398.19	\$28.13
7. Utilities	380	38	0	0	0	0	342	0	0	0	0	0	380	\$18,170.08	\$47.82
8. Environmental Permits, Compliance & Clearances	30	0	0	0	0	0	0	0	0	0	0	0	30	\$1,226.10	\$40.87
9. Structures - Misc. Tasks, Dwg's, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
19. Signing & Pavement Marking Analysis	194	58	0	0	78	58	0	0	0	0	0	0	194	\$7,430.44	\$38.30
20. Signing & Pavement Marking Plans	79	20	4	4	28	24	0	0	0	0	0	0	80	\$3,229.28	\$40.37
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
<b>Total Staff Hours</b>	<b>2,984</b>	<b>809</b>	<b>37</b>	<b>37</b>	<b>785</b>	<b>925</b>	<b>342</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,986</b>	<b>\$117,462.66</b>	<b>\$39.60</b>
<b>Total Staff Cost</b>		<b>\$39,508.40</b>	<b>\$2,312.50</b>	<b>\$2,419.43</b>	<b>\$30,614.70</b>	<b>\$29,020.25</b>	<b>\$16,361.28</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>		<b>\$117,462.66</b>	<b>\$39.60</b>

GRAND TOTAL ESTIMATED FEE:

Check = \$117,462.66

\$117,462.66

**Project Activity 4: Roadway Analysis**

Estimator:										Reconstruction of Sligh Boulevard and Columbia Street									
Task No.	Task	Units	Original Scope Hours		Revised Scope Hours		Total Hours		Hours Delta	Supp #1	Comments								
			No of Units	Hours/ Unit	No of Units	Hours/ Unit	Total Hours	Total Hours											
4.1	Typical Section Package	LS	1	30			30		0		Includes typical for Sligh and Columbia (24 initial (includes Sligh) + 8 for Columbia) No formal Package (like FDOT), this is to prepare typicals for plan sheets								
4.2	Pavement Design Package	LS	1	40			40		0		Reconstruction of Sligh Boulevard and Columbia Street (20 hrs/ street)								
4.3	Access Management	LS	1	0			0		0										
4.4	Horizontal/Vertical Master Design Files	LS	1	200			200		80	80	Originally estimated 80 hours for Sligh Boulevard & 120 for Columbia utilizing the low range estimate from the FDOT man-hours estimating guidelines. Due to the complexity of the Sligh Boulevard corridor and multiple redesigns (West side bus lane, Middle bus lane 25 mph & Middle bus lane 30 mph) WGI utilized 150 hours for Sligh Boulevard. Originally estimated 120 hours for Columbia Street, WGI provided multiple concepts for Columbia St, which required a total of 130 hours on.								
4.5	Cross Section Design Files	LS	1	150			150		150	150	Originally assumed 100' spacing and middle range project b/c of reconstruction but due to the complexity of the project analysis was based on 50' spacings to calculate an accurate earthwork due to the sudden changes in typical and geometry.								
4.6	Traffic Control Analysis	LS	1	0			0		0		Dannick (See Dannick's Revised Hours Summary)								
4.7	Master TCP Design Files	LS	1	0			0		0		Dannick (See Dannick's Revised Hours Summary)								
4.8	Design Variations and Exceptions	LS	1	0			0		0										
4.9	Design Report	LS	1	24			24		0		Design documentation submitted with phase submittals (40hrs for Phase II and 20 for each additional phase - Phase IV and Final)								
4.10	Computation Book & Quantities	LS	1	40			40		0		Summary of tables in plans								
4.11	Cost Estimate	LS	1	40			40		0		Will provide pay item list and estimate at each phase submittal.								
4.12	Technical Special Provisions	LS	1	0			0		0		no tap for roadway								
4.13	Other Roadway Analysis	LS	1	120			120		60	60	Originally assumed 60 hours for Sligh Boulevard and 60 hours for Columbia Street to establish a typical concept for each project. Due to the multiple concept exploration for Sligh Boulevard WGI utilized 100 hours for the Sligh Boulevard concept analysis alone. The analysis for 1 typical concept for Columbia St. required WGI 80 hours.								
Roadway Analysis Technical Subtotal					644				934										



# Project Activity 4: Roadway Analysis

Task No.	Units	No of Units	Hours/ Unit	Total Hours	No of Units	Hours/ Unit	Total Hours	Delta	Support	Comments
4.14 Field Reviews	LS	1	24	24			24	0		2 person at 3 field reviews at 4 hr each.
4.15 Technical Meetings	LS	1	41	41			41	0		Meetings are listed below
4.16 Quality Assurance/Quality Control	LS	%	5%	32	%	5%	47	15	15	
4.17 Independent Peer Review	LS	%	0%	0	%	0%	0	0		n/a
4.18 Supervision	LS	%	5%	32	%	5%	47	15	15	
Roadway Analysis Nontechnical Subtotal				773	Revised Subtotal		1093			
4.19 Coordination	LS	%	0%	0	Revised Total		1093	0		
4. Roadway Analysis Total				773	Revised Total		1093	Totals:	228	

## Technical Meetings

Typical Section	EA	1	2	2	Discuss typical section with City
Pavement	EA	1	2	2	Discuss Pavement with City staff
Access Management	EA	0	0	0	n/a
15% Line and Grade - Concept Discussion	EA	1	3	3	Will be concept discussion
Driveways	EA	0	0	0	n/a
Local Governments (cities, counties, MPO)	EA	1	2	2	1 meeting with FDOT
Work Zone Traffic Control	EA	1	2	2	Danuck
30/60/90/100% Comment Review Meeting	EA	3	2	6	Phase II, IV, and Final
Other Meetings	EA	3	2	6	Included for Misc meetings (Orlando Health, etc.) and concept discussion.
Subtotal Technical Meetings				23	
Progress Meetings (if required by FDOT)				12	Attend monthly progress meetings
Phase Review Meetings				6	Phase II, IV, and Final.
Total Meetings				41	

Carries to 4.15

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

**Project Activity 5: Roadway Plans**

Estimator:													Reconstruction of Sligh Boulevard and Columbia Street			
Task No.	Task	Scale	Units	Original Scope Hours				Revised Scope Hours				Hours Delta	Supp #1	Comments		
				No. of Units	Hours/ Unit	No. of Sheets	Total Hours	No. of Units	Hours/ Unit	No. of Sheets	Total Hours					
5.1	Key Sheet		Sheet	1	8	1	8				8	0				
5.2	Summary of Pay Items Including Quantity Input		Sheet	2	0	2	0	1	12	1	12	12	12	City has required a summary of pay items which was not negotiated originally. (4hr/phase x 3 phases)		
5.3	Drainage Map		Sheet	0	0	0	0				0	0				
5.4	Interchange Drainage Map		Sheet	0	0	0	0				0	0				
5.5	Typical Section Sheets		1	2	12	2	24				24	0		2 Sligh and 2 Columbia		
5.6	General Notes/Pay Item Notes		Sheet	2	8	2	16				16	0		One sheet for Sligh and Columbia		
5.7	Summary of Quantities		Sheet	4	12	4	48				48	0		to create Summary of quantity table in plans.		
5.8	Box Culvert Data Sheet		Sheet	0	0	0	0				0	0				
5.9	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0				0	0				
5.10	Summary of Drainage Structures		Sheet	1	0	1	0	1	12	1	12	12	12	Original scope had no drainage design for Sligh Boulevard or Columbia. Updated scope will address all drainage design.		
5.11	Optional Pipe/Culvert Material		Sheet	0	0	0	0				0	0				
5.12	Project Layout		Sheet	1	0	1	0	1	6	1	6	6	6	City has requested a project layout sheet which was not required originally.		
5.13	Plan/Profile Sheet	20	Sheet	10	4	10	40				40	0	0	Originally assumed 40' scale, due to the excessive details a 20' scale was implemented. The numbers of sheet still remains as 10 covering Sligh Boulevard and the west side of Columbia Street.		
5.14	Profile Sheet		Sheet	0	0	0	0				0	0		n/a use plan/profile		
5.15	Plan Sheet		Sheet	0	0	0	0				0	0		n/a use plan/profile		
5.16	Special Profile		Sheet	0	0	0	0				0	0		n/a		

### Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/Unit	No. of Sheets	Total Hours	No. of Units	Hours/Unit	No. of Sheets	Total Hours	Delta	Supp #1	Comments
5.17	Back of Sidewalk Profile Sheet		Sheet	5	8	5	40	0	0	0	0	-40	-40	use due to proximity of sidewalk with r/w. (Double Stack) Back of sidewalk is eliminated and changes are covered under standard profile.
5.18	Interchange Layout Sheet		Sheet	0	0	0	0				0	0		n/a
5.19	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0				0	0		n/a
5.20	Intersection Layout Details		Sheet	6	24	6	144				144	0		use for sidewalk return improvements. 11 sidestreets and 2 per sheet.
5.21	Miscellaneous Detail Sheets		Sheet	2	40	2	80				80	0	0	Detail sheets will cover special details to assist the construction for the contractor. Some of this details are: Tree wells, Tree grates, Concrete Bands, Driveways, Curb transitions, Pavement details, Structural soil, Sidewalk detail for roof drain connections & others.
5.22	Drainage Structure Sheet (Per Structure)		EA	0	0	0	0	37	2	12	74	74	74	Original scope had no drainage design for Sligh Boulevard or Columbia. Updated scope will address all drainage design for this project.
5.23	Miscellaneous Drainage Detail Sheets		Sheet	1	0	1	0	2	8	2	16	16	16	Miscellaneous drainage detail sheets that will include connection details to existing structures and roof drains connections.
5.24	Lateral Ditch Plan/Profile		Sheet	0	0	0	0				0	0		
5.25	Lateral Ditch Cross Sections		EA	0	0	0	0				0	0		
5.26	Retention/Detention Ponds Detail Sheet		Sheet	0	0	0	0				0	0		
5.27	Retention Pond Cross Sections		EA	0	0	0	0				0	0		
5.28	Cross-Section Pattern Sheet		Sheet	0	0	0	0				0	0		n/a.
5.29	Roadway Soil Survey Sheet		Sheet	1	8	1	8				8	0		Incorporate geotech sheet into plans.

**Project Activity 5: Roadway Plans**

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Delta	Supp #1	Comments
5.30	Cross Sections		EA	0	0	0	0	57	0.5	15	29	29	29	Original scope did not allocate hours for cross section sheets, this element is essential to provide the contractor guidance of elements and tie-downs along the project.
5.31	Driveways		Sheet	0	0	0	0				0	0		Dannick
5.32	Traffic Control Cross Section Sheets		EA	0	0	0	0				0	0		Dannick
5.33	Traffic Control Detail Sheets		Sheet	0	0	0	0				0	0		Dannick
5.34	Utility Adjustment Sheets		Sheet	6	0	6	0	10	6	10	60	60	60	Due to the the amount of utilities within the project limits and limited space on plans & profile sheets to call out the utility adjustment information, it was necessary to create utility adjustment sheets. Sue verification data will be included in the utility adjustment sheets.
5.35	Selective Clearing and Grubbing		Sheet	0	0	0	0				0	0		
5.36	Erosion Control Plan		Sheet	10	2	10	20				20	0		put on TCP plans 2 hrs/sheet
5.37	SWPPP		Sheet	1	0	1	0				0	0		by contractor
5.38	Project Control Network Sheet		Sheet	0	0	0	0				0	0		
5.39	Environmental Detail Sheets		LS	0	0	0	0				0	0		
5.40	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0				0	0		
Roadway Plans Technical Subtotal						55	428				597			
5.41	Quality Assurance/Quality Control		LS	%	5%		21	%	5%		30	9	9	
5.42	Supervision		LS	%	5%		21	%	5%		30	9	9	
5. Roadway Plans Total						55	470				657	Totals:	187	

### Project Activity 6: Drainage Analysis

Task No.	Task	Units	Original Scope Hours			Revised Scope Hours			Hours Delta	Supp #1	Comments
			No of Units	Hours/ Unit	Total Hours	No. of Units	Hours/ Unit	Total Hours			
6.1	Determine Base Clearance Water Elevation	Per Location	0	0	0			0	0		
6.2	Pond Siting Analysis and Report	Per Basin	0	0	0			0	0		
6.3	Design of Cross Drains	EA	0	0	0			0	0		
6.4	Design of Roadway Ditches	Per Ditch Mile	0	0	0			0	0		
6.5	Design of Outfalls	EA	1	0	0	1	24	24	24	24	Analyze pipe outfall to Lake of the Woods from Columbia St. & Sligh Blvd. Connection
6.6	Design of Stormwater Management Facility (Offsite Pond)	EA	0	0	0			0	0		
6.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond or Infield Pond)	Per System	0	0	0			0	0		
6.8	Design of Flood Plain Compensation Area	Per Encroachment	0	0	0			0	0		
6.9	Design of Storm Drains	EA	0	0	0	37	3	111	111	111	19 proposed structures for Columbia Street from Division to Sligh Boulevard. 18 proposed structures for Sligh Boulevard from Miller Street to Columbia Street.
6.10	Optional Culvert Material	LS	0	0	0			0	0		
6.11	French Drain Systems	Per 1000 Feet of French Drain	0	0	0			0	0		
6.12	Drainage Wells	EA	0	0	0			0	0		
6.13	Drainage Design Documentation Report	LS	1	0	0	1	40	40	40	40	Full drainage design documentation report
6.14	Bridge Hydraulic Report	EA	0	0	0						
6.15	Temporary Drainage Analysis	LS	1	0	0	1	8	8	8	8	Sligh Boulevard and Columbia Street

### Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	No of Units	Hours/ Unit	Total Hours	hours Delta	Supp #1	Comments
6.16	Cost Estimate	LS	1	0	0	1	4	4	4	4	Slight Boulevard and Columbia Street
6.17	Technical Special Provisions	LS	1	0	0	1	8	8	8	8	Root Drain Connections
6.18	Other Drainage Analysis	LS	1	0	0	1	16	16	16	16	Root Drain Discharge Analysis and drainage analysis for raised intersection at Sligh and Copeland.
Drainage Analysis Technical Subtotal			0		0		211				
6.19	Field Reviews	LS	2	4	8			8	0	0	1 person 2 field rev. 4hrs each
6.20	Technical Meetings	LS	1	8	8			8	0	0	Meetings are listed below
6.21	Quality Assurance/Quality Control	LS	%	5%	0	%	5%	11	11	11	
6.22	Independent Peer Review	LS	%	0%	0	%	0%	0	0		
6.23	Supervision	LS	%	5%	0	%	5%	11	11	11	
Drainage Analysis Nontechnical Subtotal			16		16		249				
6.24	Coordination	LS			0	%	3%	14	14	14	Coordination with ORMC & Hampton Inn Consultant
6. Drainage Analysis Total			16		16		263		Totals: 247		

#### Technical Meetings

Task	Units	No of Units	Hours/ Unit	Total Hours	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?
Driveways	EA	0	0	0				Yes / No Number
Pond Siting	EA	0	0	0				no 0
Agency (SURWMD)	EA	1	4	4	0	0	0	no 0
Local Governments (City of Orlando)	EA	2	2	4	4	2	8	no 0
FDOT Drainage	EA	0	0	0				no 0
Other Meetings	EA	0	0	0				Yes 0
Subtotal Technical Meetings			8		8		Revised Subtotal 8	

Progress Meetings (if required by FDOT)

EA	0	0	0
EA	0	0	0

Project manager meetings

2	Carries to Task 3, Project General
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Total Meetings

8

Carries to 6.20

Carries to Task 3, Project General

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Coo\_Sligh\_Bldg\_WGI\_Supplementals\_revised  
6. Drainage Analysis

# **Project Activity 7: Utilities**

Estimator:

Reconstruction of Sligh Boulevard and Columbia Street

Task No.	Task	Units	Original Scope Hours			Revised Scope Hours			Hours Delta	Supp #1	Comments
			No of Units	Hours/ Unit	Total Hours	No of Units	Hours/ Unit	Total Hours			
7.1	Kickoff Meeting	LS	1	4	4			4	0		Meet with City staff, inc. agenda/minutes
7.2	Identify Existing UAO(s)	LS	1	8	8			8	0		Sunshine 811, field review, review plans and permits
7.3	Make Utility Contacts	LS	2	14	28	1	14	42	14	14	2 distributions x 14 UAOs x 1 hr/UAO. Additional 1 distribution with new project limits
7.4	Exception Coordination	LS	1	0	0			0	0		N/A
7.5	Preliminary Utility Meeting	LS	1	0	0			0	0		N/A
7.6	Individual/Field Meetings	LS	4	4	16			16	0		4 field meetings inc. agenda/minutes
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	14	14	1	14	28	14	14	14 UAOs x 1 hr/UAO. Additional hours to collect new distribution from UAOs due to new project limits
7.8	Subordination of Easements Coordination	LS	1	0	0			0	0		N/A
7.9	Utility Design Meeting	LS	1	20	20			20	0		Inc. schedule, agenda/minutes
7.10	Review Utility Markups and Work Schedules, and Processing of Schedules and Agreements	LS	2	14	28			28	0		14 UAOs x 4 hr/UAO
7.11	Utility Coordination/Followup	LS	2	14	28			28	0		14 UAOs x 2 hr/UAO
7.12	Utility Constructability Review	LS	2	14	28			28	0		14 UAOs x 2 hr/UAO
7.13	Additional Utility Services	LS	1	12	12			12	0		Misc. Coordination (Orlando Health, etc.)
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0			0	0		N/A
7.15	Contract Plans to UAO(s)	LS	1	14	14			14	0		Send final plans to all UAOs
7.16	Certification/Close-Out	LS	1	0	0			0	0		No cert. required

**Project Activity 7: Utilities**

7.17	Other Utilities (Sewer Design)	LS	1	0	0	1	152	152	152	152	Sewer Design: This task includes preparing plans, profiles and details to replace (construct new & remove old) existing sewer laterals for Sligh and Columbia Street. Also relocating and reconstructing the segment of sewer line between Copeland and Underwood. This task does not include hours for permitting, additional survey or SUE, hydraulic analysis since it is assumed that is not needed.
7. Utilities Total							200	Revised Total	380	Totals:	180

**Technical Meetings**

Kickoff	EA	1
Preliminary Meeting	EA	1
Individual UAO Meetings	EA	0
Field Meetings	EA	0
Design Meeting	EA	2
Other Meetings	EA	1

**Total Technical Meetings**

5

**Driveways**

1	Brighthouse Networks
2	City of Orlando Wastewater
3	FPL FiberNet
4	Level 3
5	MCI
6	OOCEA
7	OUC Water
8	OUC Electric
9	TECO Peoples Gas
10	AT&T Distribution
11	AT&T Transmission
12	TW Telecom
13	Wiring Technologies
14	Traffic Control Devices



## TASK BREAKDOWN – DANNICK

Dannick Engineering Consultants, Inc.									
City of Orlando Sligh Boulevard Project									
Description	Hours	Original Hours		Hours	Revised Hours		Hours	Hours	
		Fee	Fee (3.0)		Fee	Fee (3.0)	Differential	Fee (3.0)	Differential
<b>Roadway and Structures</b>									
Act. 4 - Roadway Analysis	210	\$ 10,500.00	\$ 31,500.00	300	\$ 15,000.00	\$ 45,000.00	90	\$ 13,500.00	
Act. 5 - Roadway Plans	146	\$ 6,332.00	\$ 18,996.00	302	\$ 13,148.00	\$ 39,444.00	156	\$ 20,448.00	
Act. 9 - Structures - Misc., Tasks, Dwgs, Non-Tech.	46	\$ 2,143.00	\$ 6,429.00	46	\$ 2,143.00	\$ 6,429.00	0	\$ -	
Act. 18 - Structures - Miscellaneous	178	\$ 7,164.50	\$ 21,493.50	178	\$ 7,164.50	\$ 21,493.50	0	\$ -	
<b>Total:</b>	<b>580</b>	<b>\$ 26,139.50</b>	<b>\$ 78,418.50</b>	<b>826</b>	<b>\$ 37,455.50</b>	<b>\$ 112,366.50</b>	<b>246</b>	<b>\$ 33,948.00</b>	

# ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Reconstruction of Sligh Boulevard and Columbia Street  
 County: Orange County - City of Orlando  
 FPN: FAP No.:

Dannick Roadway Structures - Exhibit II

Consultant Name: Dannick  
 Consultant No.:  
 Date: 2/20/2014  
 Estimator: Dannick

Staff Classification	Total Staff Hours From Summary -	PM Roadway	PM Structures	Sr. Proj. Engineer	Project Engineer	CADD Tech	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
4. Roadway Analysis	300	150	0	150	0	0	0	0	0	0	0	0	0	300	\$15,000.00	\$50.00
5. Roadway Plans	302	106	0	106	0	91	0	0	0	0	0	0	0	303	\$13,148.00	\$43.39
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
9. Structures - Misc. Tasks, Digs, Non-Tech,	46	0	28	0	18	0	0	0	0	0	0	0	0	46	\$2,143.00	\$46.39
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
18. Structures - Miscellaneous	178	71	0	0	53	53	0	0	0	0	0	0	0	177	\$7,164.50	\$40.48
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
31. Architectural Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
Total Staff Hours	826	327	28	256	71	144	0	0	0	0	0	0	0	826	\$37,455.50	\$45.35
Total Staff Cost		\$17,985.00	\$1,540.00	\$11,520.00	\$2,378.50	\$4,032.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$37,455.50	\$45.35

GRAND TOTAL ESTIMATED FEE:

Check = \$37,455.50  
 \$37,455.50

# Project Activity 4: Roadway Analysis

Dannick TCP Man-Hours Estimate  
Estimator:

Task No.	Task	Units	Original Scope Hours			Revised Scope Hours			Hours Delta	Suppl #1	Comments
			No of Units	Hours/ Unit	Total Hours	No of Units	Hours/ Unit	Total Hours			
4.1	Typical Section Package	LS	1	0	0			0	0		Information Provided by Wantman Group
4.2	Pavement Design Package	LS	1	0	0			0	0		
4.3	Access Management	LS	1	0	0			0	0		
4.4	Horizontal/Vertical Master Design Files	LS	1	0	0			0	0		Information Provided by Wantman Group
4.5	Cross Section Design Files	LS	1	0	0			0	0		
4.6	Traffic Control Analysis	LS	1	160	160			160	0		Provide analysis and typical and require contractor to design during construction per FDOT Standard Index
4.7	Master TCP Design Files	LS	1	0	0	1	96	96	96	96	Scale 60' with 2 Phase and 1 mile (48hrs*1mile*2phases)
4.8	Design Variations and Exceptions	LS	1	0	0			0	0		
4.9	Design Report	LS	1	0	0			0	0		
4.10	Computation Book & Quantities	LS	1	0	0			0	0		
4.11	Cost Estimate	LS	1	0	0			0	0		
4.12	Technical Special Provisions	LS	1	0	0			0	0		
4.13	Other Roadway Analysis	LS	1	0	0			0	0		
Roadway Analysis Technical Subtotal					160	Revised Subtotal		256			
4.14	Field Reviews	LS	1	16	16			16	0		2 Person, 4hr, 2 reviews TCP ONLY (2*4*2)
4.15	Technical Meetings	LS	1	18	18			2	-16	-16	Revised meetings are listed below
4.16	Quality Assurance/Quality Control	LS	%	5%	8	%	5%	13	5	5	
4.17	Independent Peer Review	LS	%	0%	0	%	0%	0	0		
4.18	Supervision	LS	%	5%	8	%	5%	13	5	5	
Roadway Analysis Nontechnical Subtotal					50	Revised Subtotal		44			
4.19	Coordination	LS	%	0%	0			0	0		
4. Roadway Analysis Total					210	Revised Total		300	Totals:	90	

# Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/Unit	Total Hours	No of Units	Hours/Unit	Total Hours	Delta	Supp #1	Comments
<b>Technical Meetings</b>											
	Typical Section	EA	1	2	2	0	2	0	0	-2	Discuss MOT section with City
	Pavement	EA	0	0	0	0	0	0	0	0	
	Access Management	EA	1	2	2	0	2	0	0	-2	Discuss closures/sidestreets
	15% Line and Grade	EA	0	0	0	0	0	0	0	0	n/a
	Driveways	EA	0	0	0	0	0	0	0	0	
	Local Governments (cities, counties, MPO)	EA	1	0	0	0	0	0	0	0	
	Work Zone Traffic Control	EA	1	2	2	1	2	2	0	0	Discuss concepts TCP
	30/60/90/100% Comment Review Meeting	EA	3	2	6	0	2	0	0	-6	Phase II, IV, and Final
	Other Meetings	EA	1	0	0	0	0	0	0	0	Not required
	<b>Subtotal Technical Meetings</b>				<b>12</b>			<b>2</b>			
	Progress Meetings (if required by FDOT)	EA	0	0	0	0	0	0	0	0	Attend monthly progress meetings
	Phase Review Meetings	EA	3	2	6	0	2	0	0	0	Phase II, IV, and Final.
	<b>Total Meetings</b>				<b>18</b>		<b>Revised Meetings</b>	<b>2</b>			

Carries to 4, 15

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

**Project Activity 5: Roadway Plans**

Dannick TCP Man-Hours Estimate  
Estimator:

Task No.	Task	Scale	Units	Original Scope Hours				Revised Scope Hours				Hours Delta	Supp #1	Comments
				No. of Units	Hours/ Unit	No. of Sheets	Total Hours	No. of Units	Hours/ Unit	No. of Sheets	Total Hours			
5.1	Key Sheet		Sheet	0	0	0	0				0	0		
5.2	Summary of Pay Items Including Quantity Input		Sheet	0	0	0	0				0	0		
5.3	Drainage Map		Sheet	0	0	0	0				0	0		
5.4	Interchange Drainage Map		Sheet	0	0	0	0				0	0		
5.5	Typical Section Sheets		Sheet	0	0	0	0				0	0		
5.6	General Notes/Pay Item Notes		Sheet	0	0	0	0				0	0		
5.7	Summary of Quantities		Sheet	0	0	0	0				0	0		
5.8	Box Culvert Data Sheet		Sheet	0	0	0	0				0	0		
5.9	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0				0	0		
5.10	Summary of Drainage Structures		Sheet	0	0	0	0				0	0		
5.11	Optional Pipe/Culvert Material		Sheet	0	0	0	0				0	0		
5.12	Project Layout		Sheet	0	0	0	0				0	0		
5.13	Plan/Profile Sheet		Sheet	0	0	0	0				0	0		
5.14	Profile Sheet		Sheet	0	0	0	0				0	0		
5.15	Plan Sheet		Sheet	0	0	0	0				0	0		
5.16	Special Profile		Sheet	0	0	0	0				0	0		
5.17	Back of Sidewalk Profile Sheet		Sheet	0	0	0	0				0	0		
5.18	Interchange Layout Sheet		Sheet	0	0	0	0				0	0		
5.19	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0				0	0		
5.20	Intersection Layout Details		Sheet	0	0	0	0				0	0		
5.21	Miscellaneous Detail Sheets		Sheet	0	0	0	0				0	0		
5.22	Drainage Structure Sheet (Per Structure)		EA	0	0		0				0	0		

**Project Activity 5: Roadway Plans**

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	hours Delta	Supp #1	Comments
5.23	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0				0	0		
5.24	Lateral Ditch Plan/Profile		Sheet	0	0	0	0				0	0		
5.25	Lateral Ditch Cross Sections		EA	0	0		0				0	0		
5.26	Retention/Retention Ponds Detail Sheet		Sheet	0	0	0	0				0	0		
5.27	Retention Pond Cross Sections		EA	0	0		0				0	0		
5.28	Cross-Section Pattern Sheet		Sheet	0	0	0	0				0	0		
5.29	Roadway Soil Survey Sheet		Sheet	0	0	0	0				0	0		
5.30	Cross Sections		EA	0	0		0				0	0		
5.31	Traffic Control Plan Sheets		Sheet	8	13	8	104	15	6	15	90	90	90	Includes Notes, Typical & Plan Sheets for each phase. This includes additional detail for Columbia
5.32	Traffic Control Cross Section Sheets		EA	0	0		0	10	1	10	10	10	10	Includes cross sections to detail areas of ITCP.
5.33	Traffic Control Detail Sheets		Sheet	4	7	4	28	6	7	6	42	42	42	Includes Road & Sidewalk detail details. Special Details for ORMC warehouse
5.34	Utility Adjustment Sheets		Sheet	0	0	0	0				0	0		
5.35	Selective Clearing and Grubbing		Sheet	0	0	0	0				0	0		
5.36	Erosion Control Plan		Sheet	0	0	0	0				0	0		
5.37	SWPPP		Sheet	0	0	0	0				0	0		
5.38	Project Control Network Sheet		Sheet	0	0	0	0				0	0		
5.39	Environmental Detail Sheets		LS	0	0		0				0	0		
5.40	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0				0	0		
Roadway Plans Technical Subtotal						12	132				274	142		
5.41	Quality Assurance/Quality Control		LS	%	5%		7	%	5%		14	14	14	
5.42	Supervision		LS	%	5%		7	%	5%		14	14	14	
5. Roadway Plans Total						12	146			Revised Total	302	170	156	

# **Project Activity 9: Structures - Summary and Miscellaneous Tasks and Drawings**

Estimator:

#REF!  
#REF!

Task No.	Task	Units	Design and Production Staffhours				Comments				
			No. of Units	Hours per Unit	No. of Sheets	Total					
	General Drawings										
9.1	Index of Drawings	Sheet	0	0	0	0					
9.2	Project Layout	Sheet	0	0	0	0					
9.3	General Notes and Bid Item Notes	Sheet	0	0	0	0					
9.4	Miscellaneous Common Details	Sheet	0	0	0	0					
9.5	Incorporate Report of Core Borings	Sheet	0	0	0	0					
9.6	Existing Bridge Plans	LS	0	0		0					
9.7	Assemble Computation Book and Quantities	LS	0	0		0					
9.8	Cost Estimate	LS	0	0		0					
9.9	Technical Special Provisions	LS	0	0		0					
Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					0	0					
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-16	Bridge 1	0	0	0	0	0	0	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
17	Retaining Walls	0								0	
18	Miscellaneous Structures	160									160
Structures Technical Subtotals		160	0	0	0	0	0	0	0	0	160



### Project Activity 9: Structures - Summary and Miscellaneous Tasks and Drawings

Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments
9.10	Field Reviews	LS	1	12	12	2 persons * 1 field review * 6 hrs
9.11	Technical Meetings	LS	1	16	16	Meetings are listed below
9.12	Quality Assurance/Quality Control	LS	%	5%	8	
9.13	Independent Peer Review	LS	%	0%	0	
9.14	Supervision	LS	%	5%	8	
<b>Structures Nontechnical Subtotal</b>					<b>44</b>	
9.15	Coordination	LS	%	5%	2	
<b>9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total</b>					<b>46</b>	

### Technical Meetings

BDR Coordination/Review	EA	0	0	0
90/100% Comment Review	EA	1	6	6
Aesthetics Coordination	EA	1	10	10
Regulatory Agency	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Utility Companies	EA	0	0	0
Other Meetings	EA	0	0	0
<b>Subtotal Technical Meetings</b>				<b>16</b>

Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0

<b>Total Meetings</b>				<b>16</b>
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Carries to 9.11

**Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3.**

**Project Activity 18: Structures - Miscellaneous**

Task No	Task	Unit	Original Scope Hours			Revised Scope Hours			Hours Delta	Suppl #1	Comments
			No. of Units	Hours/ Unit	No. of Sheets	Total Hours	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	
	Concrete Box Culvert										
18.1	Concrete Box Culverts	EA	0	0	0	0				0	0
18.2	Concrete Box Culverts Extensions	EA Extension	0	0	0	0				0	0
	Quad Gates										
18.3	Quad Gates	Initial Config EA Add'l Config	0 0	0 0	1 0	0 0				0 0	0 0
18.4	Concrete Strain Poles	Initial Config EA Add'l Config	0 0	0 0	0 0	0 0				0 0	0 0
	Mast Arms										
18.5	Mast Arms	EA Pole	4	12	4	48	0	0	0	0	-48
	Overhead/Cantilever Sign Structures										
18.6	Cantilever Sign Structures	EA Design	0	0	0	0				0	0
18.7	Overhead Span Sign Structures	EA Design	0	0	0	0				0	0
18.8	Special (Long Span) Overhead Sign Structures	EA Design	0	0	0	0				0	0
18.9	Monotube Overhead Sign Structure	EA Design	0	0	0	0				0	0
18.10	Bridge Mounted Signs (Attached to Superstr.)	EA Design	0	0	0	0				0	0
	Bus Shelter										

**Project Activity 18: Structures - Miscellaneous**

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Hours Delta	Supp. \$1	Comments
18.11	Bus Shelter	EA Design	1	130	2	130				90	-40	-40	Design: Design of (4) post foundations using RISA-3D or EnerCAD or equivalent software. Specialty engineer will provide construction documents for the bus shelter structure above the slab on grade. - 50 hours CADD: Includes drafting of (5) sheets: Structural Notes Sheet, Foundation Layout Sheet, Roof Layout Sheet, Foundation Section Sheet, and Roof Section Sheet. - 40 hours Shop Drawing Review: To be negotiated later.
<b>Sound Barrier Walls (Ground Mount)</b>													
18.12	Horizontal Wall Geometry	EA Wall	0	0	0	0				0	0		
18.13	Vertical Wall Geometry	EA Wall	0	0	0	0				0	0		
18.14	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0				0	0		
18.15	Control Drawings	Sheet	0	0	0	0				0	0		
18.16	Design for Wall Height Covered by Standards	EA Design	0	0	0	0				0	0		
18.17	Design for Wall Height Not Covered by Standards	EA Design	0	0	0	0				0	0		
18.18	Aesthetic Details	LS	0	0	0	0				0	0		
<b>Special Structures</b>													
18.19	Fender System	LS	1	0		0				0	0		
18.20	Fender System Access	LS	1	0		0				0	0		
18.21	Special Structures	LS	1	0		0				0	0		
18.22	Other Structures	LS	1	0		0				0	0		

**Project Activity 18: Structures - Miscellaneous**

Task No.	Task	Unit	No. of Units	Hours/Unit	No. of Sheets	Total Hours	No. of Units	Hours/Unit	No. of Sheets	Total Hours	Hours Delta	Supp #1	Comments
18.23	Steel & Concrete Bollards	EA Design					1	70	0	70	70	78	Steel Bollards (Orlando Health Warehouse): Design: No structural design is anticipated for the steel bollards to be placed around fixed objects located in front of the Orlando Health Warehouse. This bollards will not be crashworthy since the fixed objects adjacent to Sligh Blvd. are located outside of the clearzone according to Florida Greenbook criteria and the City of Orlando has expressed their preference avoiding the use of crashworthy bollards at this locations. The bollards to be used will be bolted bollards, only intended as advanced warning to cars and trucks utilizing the driveway. A CADD detail will be provided for a thicker driveway slab at any anchor bolt connection for the proposed bollards. (See CADD hours description below) CADD: Includes drafting of (1) Modified Driveway Concrete Thickness and Anchor Bolt Details for bolted steel bollards - 20 hours Design: Structural analysis and design of (2) concrete bollards and (2) bollard foundations using RISA-3D or equivalent software. - 30 hours CADD: Includes drafting of (3) sheets: (1) Structural Notes Sheet, (1) Plan View Sheet, and (1) Structural Sections & Details Sheet - 20 hours Shop Drawing Review: To be negotiated later.
<b>18. Structures - Miscellaneous Structures Total</b>													
4.14	Field Reviews	LS	1	12		0				0	0		See Act. 9.0 Structures summary for breakdown
4.15	Technical Meetings	LS	1	16		0				0	0		See Act. 9.0 Structures summary for breakdown
4.16	Quality Assurance/Quality Control	LS	%	5%		0	%	5%		9	9	9	
4.17	Independent Peer Review	LS	%	0%		0	%	0%		0			
4.18	Supervision	LS	%	5%		0	%	5%		9	9	9	
											<b>178</b>	<b>Totals:</b>	<b>0</b>

**Technical Meetings**

BDR Coordination/Review  
90/100% Comment Review

EA 0 0 0  
EA 1 6 6

**Project Activity 18: Structures - Miscellaneous**

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Hours Delta	Support	Comments
	Aesthetics Coordination	EA	1	10	10								
	Regulatory Agency	EA	0	0	0								
	Local Governments (cities, counties)	EA	0	0	0								
	Utility Companies	EA	0	0	0								
	Other Meetings	EA	0	0	0								
	<b>Subtotal Technical Meetings</b>				<b>16</b>								
	Progress Meetings	EA	0	0	0								
	Phase Review Meetings	EA	0	0	0								
	<b>Total Meetings</b>				<b>16</b>								